(54) Title: SYSTEM AND METHOD FOR COUNTING THE NUMBER OF LAYERS OF A MULTILAYER OBJECT BY MEANS OF ELECTROMAGNETIC WAVES
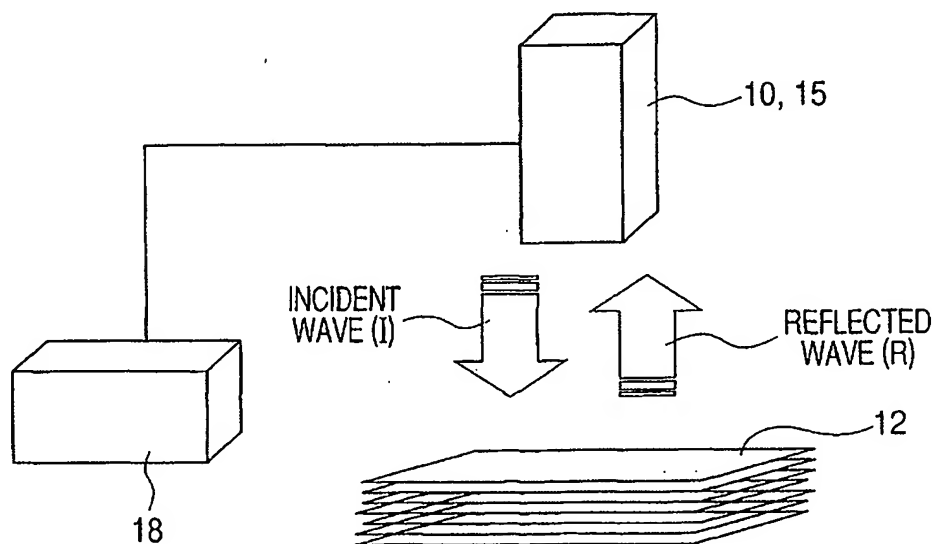
(57) Abstract: A system or method is adapted for counting the number of layers of a multilayer object such as a stack of paper. An electromagnetic wave is caused to strike the surface of the multilayer object. Signals of the waves generated by reflection at the respective interfaces of the layers are evaluated to count the number of layers. Alternatively, the phase of the electromagnetic wave transmitted through the multilayer object, is evaluated to determine the number of layers. It is proposed to use frequencies from 30 GHz to 100 THz, ie. microwaves, millimeter waves and infrared waves.